DOCUMENT RESUME

ED 210 628 CS 006 368

AUTHOR Schell, Leo M.
TITLE The Validity of the Potential Level Via Listening Comprehension: A Cautionary Note.
PUB DATE Oct 81
NOTE 14p.; Paper presented at the Annual Meeting of the Plains Regional Conference of the International Reading Association (9th, Des Moines, IA, October 22-24, 1981).

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Academic Aptitude; *Educational Diagnosis; *Listening Comprehension; Primary Education; *Reading Achievement; *Reading Comprehension; Reading Diagnosis; Remedial Instruction; *Testing Problems; Test Validity

ABSTRACT

The concept that a child's potential reading level can be measured via listening comprehension has at least one major shortcoming: it is of doubtful worth for children in grades one through three. First, reading comprehension and listening comprehension are not approximately equal early in a child's schooling. In fact, it seems that they generally do not become approximately equal until about grade six. Second, listening and reading comprehension do not grow at approximately equal rates. Data have shown that the normal differences between these two modes of understanding are so great for children in the early grades that, if compared to the typical differences suggested by reading authorities for identifying students for remedial instruction, they would drastically overrefer children and would include vast numbers of primary grade students progressing normally in learning to read. It seems obvious that in grades one through three listening comprehension should not be unthinkingly accepted as an equal and valid substitute for measures of academic aptitude in determining reading potential. (HOD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED210628

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

THE VALIDITY OF THE POTENTIAL LEVEL VIA LISTENING COMPREHENSION: A CAUTIONARY NOTE

Leo M. Schell

College of Education

Kansas State University

Manhattan, KS 66506

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Leo M. Schell

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CS006368

Running Head: Potential Level

ABSTRACT

Historical background and relevant research were examined to determine whether the commonly recommended procedure of determining the reading potential level via listening comprehension is valid in the primary grades. No support was found for the unstated assumptions necessary for this procedure's validity. And three major studies conclusively revealed that use of this procedure to identify children for remedial instruction would drastically over-refer and would include vast numbers of primary grade children progressing normally in learning to read. Based on this evidence, it was concluded that listening comprehension seems far too inaccurate--in grades 1-3--to be used to determine the reading potential level.

THE VALIDITY OF THE POTENTIAL LEVEL VIA LISTENING COMPREHENSION: A CAUTIONARY NOTE

To get an estimate of a child's aptitude for learning to read, numerous authorities in reading, e.g., Burns and Roe (1980), Durrell (1980), Gilliland (1974), Spache (1972), and Zintz (1981), recommend that passages graded in level of difficulty be read aloud to the child and that the questions accompanying the passage be asked. The highest level at which the child's percentage of correct answers is at or above a specified standard, usually 70 or 75 percent, is said to be the child's level of reading potential. (Reading capacity and reading expectancy are widely synonyms.)

This procedure is usually presented in textbooks on remedial reading, e.g., Rupley and Blair (1979), Wilson (1981), as a substitute for a measure of academic aptitude--intelligence or mental maturity--in determining reading potential. The quickness and simplicity of this procedure probably makes it more appealing than is justified.

Background

The concept of the potential level and the procedure of determining it via listening comprehension seems to have arisen in university reading clinics in the 1930's, as one way of estimating whether a child was reading up to his/her intellectual capability (Durrell, 1937). If a sufficient discrepancy existed between the child's aptitude for learning to read and his/her actual reading achievement, the child was judged able to benefit from remedial instruction. For example, Gilliland (1974) says, "It can be expected that if his

comprehension is good when he listens to material that is read to him, he should be able to comprehend the same material if he can develop the word recognition skills to read it." (p. 45) Zintz (1981) states, "The capacity level measures the level at which the readers would function if they were able to use all their innate abilities for reading. So, if their instructional level is third grade, but their capacity (listening or understanding level) is fifth grade, they should be able to profit from remedial instruction and raise their reading levels two years." (p. 99) Numerous other reading authorities say essentially the same thing.

As early as 1930, Young (1930) investigated the relationship between listening comprehension and reading comprehension. Other investigations soon followed, e.g., Larsen and Feder (1940), with similar ones continuing right up to the present (Danks, 1980). In general, these studies corroborated the intuitions of the early directors of university reading clinics by consistently finding a positive relationship between the two modes of understanding with correlation coefficients generally ranging from .50 to .70. These studies probably strengthened the concept of measuring the potential reading level via listening comprehension.

The amount of discrepancy between the potential level and reading comprehension necessary for a child to be labelled disabled or in need of specialized remedial instruction lacks definite professional agreement although some general guidelines do exist. For example, Spache (1981) says that the difference should be one year or more if the child is in the primary grades and by two years or more if he/she is in the intermediate or upper elementary grades. Wilson (1977) agrees that the difference must be determined by the grade placement of the child but recommends that the following "tolerable differences" between potential and achievement be used:

End of:

1st grade . . . -.3

2nd grade . . . -.5

3rd grade . . . -.7

These recommendations seems to have grown out of experiences in university reading clinics and appear to be personal opinions rather than being explicitly based upon either eimpirical data or some other kind of theory.

Shortcoming

The concept that a child's potential reading level can be measured via listening comprehension has at least one major shortcoming: It is of doubtful worth for children in grades 1-3.

Two unstated assumptions of the use of the potential level to identify children who can improve their reading achievement must be, that with normally progressing children, (1) reading and listening comprehension are approximately equal early in a child's schooling and (2) both grow at approximately equal rates. Both of these assumptions appear to be erroneous.

Sticht, et al (1974) reviewed 31 studies investigating whether listening comprhension surpasses reading comprehension during the early years of schooling. They found that the percentage of comparisons in which listening was better than reading declined from 100 percent at age 3 ½ to about 20 percent at college/adult level. In other words, nearly all primary grade children comprehend better by listening than by reading. This finding is hardly surprising; Learning to read isn't begun until 4-5 years after learning to listen begins and then it proceeds rather slowly the first year or so. Over 30 years ago, McKee (1948), basing his opinion on both evidence and observation, concluded essentially the same thing, that any young child below the third grade finds it easier to understand spoken than written words (p. 10).

But the crucial question isn't whether listening comprehension exceeds reading comprehension but rather by how much it does at different grade levels. At least three studies provide sound data on this question.

Research by Moe (1957) cited by Spache (1972) compared the reading and listening levels of 166 pupils in grades 1-3 on the Diagnostic Reading Scales and found the following discrepancies.

- - - - - - - - - - - - - - - - - - -

INSERT TABLE 1 ABOUT HERE

- - - - - - - - - - - - - - - - - - -

The discrepancies between actual grade placement of the children and the means of their potential level are huge. If the subjects at each level were a representative sample of pupils at each grade placement, i.e., if the average level of reading achievement for each grade level equalled its grade placement, then according to the standards for identifying children for remedial instruction that were listed earlier in this article, the entire group of subjects would qualify for remedial instruction! Because of the way in which Moe apparently selected his subjects, this conclusion seems unlikely. A more reasonable explanation is that the notion of determining potential level via listening is somehow inapplicable to children of these age levels.

Other studies show similar patterns of discrepancies although not quite so huge. Data on 361 pupils from 24 schools in 20 school districts in three states also tested with the Diagnostic Reading Scales reveal a similar pattern (Spache, 1975).

- - - - - - - - - - - - - - - - - - -

INSERT TABLE 2 ABOUT HERE

- - - - - - - - - - - - - - - - - - -

Two aspects of this data are worth noting. One, the pattern of gradually declining discrepancies between listening and reading comprehension as subjects become older follows that found by Sticht (1974) and noted earlier in this article. Two, the discrepancies are not as large as Moe's but they are substantial and consistent. They meet or exceed the recommended differences for identifying primary grade children for remedial instruction. Without scores of individual subjects, there is no way of knowing the exact number of children who would be identified as qualifying for remedial instruction but statistically it is possible to predict that at least 50 percent of them would qualify. An enormously large number of false-positives (those appearing to qualify for remedial instruction but actually not in need of it) would be identified.

The Durrell Listening-Reading Test (1970) is intended "to measure the degree of retardation in reading as compared to listening" (p. 3). It involves a listening and a reading test equated in format, directions, mode of response, testing time, and various language factors. The normative differentials between listening and reading for selected points in grades 1-3, in grade equivalents, for slightly over 5000 pupils, are shown in Table 3.

- - - - - - - - - - - - - - - - - -

INSERT TABLE 3 ABOUT HERE

- - - - - - - - - - - - - - - - - -

These data from this specially constructed test are remarkably similar to those obtained by Spache in the standardization of his Diagnostic Reading Scales and shown in Table 2. Again, the discrepancies meet or exceed the recommended differentials mentioned earlier and are so great as to make direct meaningful comparisons between them impossible for purposes of determining reading disability.*

*It is to Durrell's credit that he seems to have realized that such direct comparisons were impossible because he used some kind of statistical transformation to establish grade equivalence for raw scores on the listening and reading tests so that listening and reading can be meaningfully compared.

Conclusions

Data from numerous studies have conclusively shown that the two unstated assumptions absolutely necessary for listening comprehension to validly measure reading potential cannot be met for pupils in grades 1-3. First, reading comprehension and listening comprehension are not approximately equal early in a child's schooling. In fact, it seems obvious that they generally don't become approximately equal in achievement until about grade 6.

Second, listening and reading comprehension do not grow at approximately equal rates. Reading comprehension grows far faster than does listening comprehension, starting far below it but eventually catching up and surpassing it.

These data have also shown that the normal differences between these two modes of understanding are so great for children in grades 1-3 that if compared to the typical differences suggested by reading authorities for identifying students for remedial instruction they would drastically over-refer children and would include vast numbers of primary grade pupils progressing normally in learning to read.

It seems obvious that--in grades 1-3--listening comprehension should not be unthinkirgly accepted as an equal and valid substitute for measures of academic aptitude in determining reading potential. Educators should be much more careful in their use and recommendation of listening comprehension as a valid measure of reading potential for children in grades 1-3 as this procedure has some severe limitations. If this procedure is recommended and/or used in these grades, these limitations should be known by all parties using the results and the subsequent high risk of misidentification of numerous normally progressing readers should be considered.

REFERENCES

Burns, P.C. and Roe, B. Informal Reading Assessment. Chicago: Rand McNally College Publishing Co., 1980.

Danks, J. "Comprehension in Listening and Reading: Same or Different?" Reading and Understanding, Frank B. Murray (ed.). Newark, DE: International Reading Association, 1980, 1-39.

Durrell, D. D. Durrell Analysis of Reading Difficulty. Yonkers-on-Hudson, N.Y.: World Book Co., 1937.

Durrell, D. D. and Hayes, M. T. Listening-Reading Tests. New York: Harcourt, Brace and World, 1970.

Durrell, D. D. and Catterson, J. H. Durrell Analysis of reading Difficulty, 3rd ed. New York: The Psychological Corp., 1980.

Gilliland, H. A Practical Guide to Remedial Reading. Columbus, OH: Charles E. Merrill, 1974.

Harris, A. J. and Sipay, E. R. How to Increase Reading Ability, 7th ed. New York: Longman, Inc., 1980.

Larsen, R. and Feder, D. "Common and Differential Factors in Reading and Hearing Comprehension." Journal of Educational Psychology, 32 (April 1940), 241-252.

Moe, Iver A. Auding Ability as a Measure of Reading Potential Among Pupils in Primary Grades. Doctoral dissertation, Jacksonville, FL: University of Florida, 1957.

Rupley, W. H. and Blair, T. R. Reading Diagnosis and Remediation. Chicago: Rand McNally College Publishing Co., 1979.

Spache, G. D. Diagnosing and Correcting Reading Disabilities, 2nd ed. Boston: Allyn and Bacon, 1981.

Spache, G. D. Examiner's Manual, Diagnostic Reading Scales, Revised Edition. Monterey, CA: CTB/McGraw Hill, 1972.

Spache, G. D. Technical Bulletin, Diagnostic Reading Scales, Revised Edition. Monterey, CA: CTB/McGraw Hill, 1975.

Sticht, T. G., et al. Auding and Reading: A Developmental Model. Alexandria, VA: HumRO, 1974.

Wilson, R. M. Diagnostic and Remedial Reading for Classroom and Clinic, 3rd ed. Columbus, OH: Charles E. Merrill Publishing Co., 1977.

Young, W. Relation of Reading Comprehension and Retention to Hearing Comprehension and Retention. Doctoral dissertation, Iowa City, IA: State University of Iowa, 1930.

Zintz, M. V. Corrective Reading, 4th ed. Dubuque, IA: Wm. C. Brown, 1981.

Table 1

Grade Equivalent Discrepancies between Means of Actual Grade Placement and Potential Level

Actual Grade Placement	Potential Level Means	Discrepancy between Placement and Potential
1.2	3.3	2.1
1.7	3.9	2.2
2.2	4.3	2.1
2.7	5.2	2.5
3.2	5.3	2.1
3.7	5.5	1.8

Table 2

Grade Equivalent Discrepancies between
Means of Instructional & Potential Levels

Grade	Instructional Level	Potential Level	Discrepancy between Instructional and Potential
1	1.7	3.1	1.5
2	2.2	3.2	1.0
3	3.4	4.2	0.8
4	3.5	4.0	0.5
5	4.5	4.8	0.3
6	4.7	5.4	0.7

Table 3

Normative Differentials between Potential and Actual Reading Grade Equivalents at Selected Grade Placements

Grade Placement	Listening Level	Reading Level	Differential
1.5	3.0	1.5	1.5
2.0	3.1	2.0	1.1
2.5	3.3	2.5	.8
3.5	3.9	3.5	.4